

Data Report For:

PREDESIGN INVESTIGATION

At The

**QUANTA RESOURCES SITE
Edgewater, New Jersey**

Prepared For:

ALLIEDSIGNAL INC.

SOLVAY, NEW YORK

Prepared By:

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May 1997



PARSONS

313367



INTRODUCTION

A focused predesign investigation was conducted between March 11 and 13, 1997, at the Quanta Resources Site in Edgewater, New Jersey to fill data gaps. Work was conducted under the approved Work Plan for the Remedial Design Services dated November 1996 (Parsons ES, 1996). A CERCLA Removal Action has been proposed to address specific contamination problems at the site. The predesign investigation included analytical sampling of soils for polychlorinated biphenyls (PCBs), total petroleum hydrocarbons (TPH), and toxicity contaminant leaching procedure (TCLP) at five locations in the vicinity of a former sample "hot spot"; sampling of insulation material on two boilers in the remaining onsite building for asbestos analysis, a magnetometer survey to identify two underground storage tanks (USTs), and a site property and topographic survey. Site background information has been presented in the Work Plan (Parsons ES, 1996) and in the Preliminary Remedial Design Report (April 1997) so it will not be repeated.

PCB SAMPLE RESULTS

Five surface soil samples were collected in the vicinity of a PCB "hot spot" previously identified in sample QE-002 near River Road (USEPA, 1994) to delineate the extent of PCBs in surface soils. Sample QE-002 contained 62 mg/kg of PCB Aroclor 1242 (USEPA, 1994). Sample results are plotted on Figure 1 and are summarized on Table 1.

PCBs were detected at low concentrations in all five surface soils samples. PCB concentrations ranged from 0.38 mg/kg (ppm) in sample SS1 to 3.65 mg/kg in sample SS4. Aroclor 1242 comprised the majority of the PCBs detected. Lesser amounts of Aroclor 1260 were detected in four of the five samples at concentrations ranging from 0.2 to 0.55 mg/kg and Aroclor 1254 in one sample at a concentration of 0.38 mg/kg. All PCB concentrations were below the USEPA Interim Surface Cleanup Standards of 2,000 ppm used at the Carvel site (New Jersey), below the USEPA general cleanup level of 10 to 25 ppm and below the TSCA limit of 50 ppm (USEPA, 1990a).

TPH SAMPLE RESULTS

The five soil samples analyzed for PCBs were also analyzed for TPH. TPH was detected in the diesel fuel range in all five samples. Concentrations ranged from 160 mg/kg in SS1 to 8,600 mg/kg in SS5. TPH was detected in the gasoline range in SS5 at a concentration of 4.4 mg/kg. The detected concentrations of TPH were below the EPA Interim Surface Cleanup Standard of 30,000 ppm used at the Carvel site (New Jersey).

TCLP SAMPLE RESULTS

The five surface soil samples were also analyzed for TCLP volatiles and metals. No volatile compounds were detected. The only metal detected was lead at concentrations ranging from 0.103 mg/L in SS2 to 0.594 mg/L in SS5. All lead concentrations were below the regulatory limit of 5 mg/L (USEPA, 1990b).

ASBESTOS SAMPLE RESULTS

Four samples were collected from insulation material on the exterior of two boilers present in the remaining onsite building. Three of the four samples contained asbestos. Sample 1 and Sample 2 collected from the Superior 1950 boiler located at the southern end of the room contained 15 and 25 percent asbestos, respectively. Sample 3 collected from the gasket material on the Cyclo-Therm 1959 boiler located at the northern end of the room contained 60 percent asbestos. Sample 4 collected from insulation material on the southern side of the Cyclo-Therm 1959 boiler did not contain asbestos.

GEOPHYSICAL SURVEY

A magnetometer survey was attempted in the area of two suspected underground storage tanks (USTs). The presence of reinforced concrete caused apparent interference in the magnetometer readings. The survey did not provide useable data.

PROPERTY AND TOPOGRAPHIC SURVEY

A site property and topographic survey was conducted to provide a site-wide property boundary and topographic map. Detailed site features and topographic contours at one foot intervals are present in this map which will be used for future site remedial designs and construction. A copy of this map has been provided to AlliedSignal recently.

RECOMMENDATIONS

The following recommendations are based on analytical results from the March 1997 surface soil and insulation material sampling, results of the geophysical survey, and referenced Standards:

- Detected PCB concentrations are below TSCA, USEPA general cleanup levels, and USEPA Interim Surface Cleanup Standards used at the Carvel site (New Jersey). No action is necessary based on detected PCB concentrations.
- Detected TPH concentrations are below USEPA Interim Surface Cleanup Standards used at the Carvel site (New Jersey). No action is necessary based on detected TPH concentrations.
- Samples analyzed by TCLP methods were all below regulatory limits. No action is necessary based on TCLP results.

- Asbestos was present on both boilers present in the remaining site building. It is recommended asbestos material be removed from the boilers.
- Conduct test pit excavation in lieu of further geophysical surveys to locate USTs in their suspected area.

REFERENCES

Parsons ES, 1996. Project Plans for the Remedial Design Services at the Quanta Resources Site, Edgewater, New Jersey, November 1996.

Parsons ES, 1997. Preliminary Remedial Design Report, NAPL Recovery System, Quanta Resources Site, Edgewater New Jersey, April 1997.

USEPA, 1994. Removal Site Evaluation for the Quanta Resources Corporation Site, Edgewater, New Jersey, USEPA Region II, June 1, 1994.

USEPA, 1990a. Guidance on Remedial Actions for Superfund Sites with PCB Contamination. Office of Emergency and Remedial Response, OSWER Directive 9355.4-01.

USEPA, 1990b. Hazardous Waste Management System, Identification and Listing of Hazardous Waste, Toxicity Characteristics Revisions. Federal Register 55 (61):11798-11877, March 29, 1990.

Table 1
Detected Compounds
AlliedSignal, Inc.
Edgewater, New Jersey Site

	Units	Sample ID					
		SS1	SS2	SS3	SS4	SS5	SS6 (D)
PCB Aroclors							
1242	mg/kg	ND	1.3	3	3.2	1.8	1.7
1254	mg/kg	0.38	ND	ND	ND	ND	ND
1260	mg/kg	ND	0.2	0.26	0.45	0.55	0.22
Total PCBs	mg/kg	0.38	1.5	3.26	3.65	2.35	1.92
TPH as #2 Fuel Oil	mg/kg	160	2500	3900	5800	8600	2800
TPH as Gasoline	mg/kg	ND	ND	ND	ND	4.4	ND
TCLP Lead	mg/L	0.207	0.103	0.107	0.193	0.594	NA

(D) - Duplicate of SS2
ND - Not Detected
NA - Not Applicable

Asbestos Results

Asbestos Minerals	Units	Sample ID			
		Sample 1	Sample 2	Sample 3	Sample 4
Amosite	Percent	5	15	ND	ND
Chrysotile	Percent	10	10	60	ND

ATTACHMENT A
ANALYTICAL DATA

FORM 1
PEST/PCB ORGANICS ANALYSIS DATA SHEET

000053
CLIENT ID

SS01

Lab Name: IEA-NJ

Client: Allied Signal Inc.

Matrix: (soil/water): SOIL

Lab Sample ID: 71102001

Sample wt/vol: 30 (g/ml) g

Lab File ID: D2B44BQ_019

% Moisture: 15 decanted: N

Date Received: 03/11/97

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 03/14/97

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 03/19/97

Injection Volume: 5.0 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH:

Sulfur Cleanup: Y

CAS NO. COMPOUND

CONCENTRATION UNITS: Q
(ug/L or ug/Kg) UG/KG

12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	380	
11096-82-5	Aroclor-1260	39	U

000059

FORM 1
PEST/PCB ORGANICS ANALYSIS DATA SHEET

CLIENT ID

SS02

Lab Name: IEA-NJClient: Allied Signal Inc.Matrix: (soil/water): SOILLab Sample ID: 71102003Sample wt/vol: 30 (g/ml) gLab File ID: D2B44BQ_030% Moisture: 15 decanted: NDate Received: 03/11/97Extraction: (SepF/Cont/Sonc) SONCDate Extracted: 03/14/97Concentrated Extract Volume: 10000 (uL)Date Analyzed: 03/19/97Injection Volume: 5.0 (uL)Dilution Factor: 5.00GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: Y

CAS NO.

COMPOUND

CONCENTRATION UNITS: Q
(ug/L or ug/Kg) UG/KG

12674-11-2	Aroclor-1016	200	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	200	U
53469-21-9	Aroclor-1242	1300	
12672-29-6	Aroclor-1248	200	U
11097-69-1	Aroclor-1254	200	U
11096-82-5	Aroclor-1260	200	

FORM 1
PEST/PCB ORGANICS ANALYSIS DATA SHEET

CLIENT ID

SS06DUP

Lab Name: IEA-NJClient: Allied Signal Inc.Matrix: (soil/water): SOILLab Sample ID: 71102004Sample wt/vol: 30 (g/ml) gLab File ID: D2B44BQ_031% Moisture: 17 decanted: NDate Received: 03/11/97Extraction: (SepF/Cont/Sonc) SONCDate Extracted: 03/14/97Concentrated Extract Volume: 10000 (uL)Date Analyzed: 03/19/97Injection Volume: 5.0 (uL)Dilution Factor: 5.00GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: Y

CAS NO.

COMPOUND

CONCENTRATION UNITS: Q
(ug/L or ug/Kg) UG/KG

12674-11-2	Aroclor-1016	200	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	200	U
53469-21-9	Aroclor-1242	1700	
12672-29-6	Aroclor-1248	200	U
11097-69-1	Aroclor-1254	200	U
11096-82-5	Aroclor-1260	220	

FORM 1
PEST/PCB ORGANICS ANALYSIS DATA SHEET

CLIENT ID

SS03

Lab Name: IEA-NJClient: Allied Signal Inc.Matrix: (soil/water): SOILLab Sample ID: 71102005Sample wt/vol: 30 (g/ml) gLab File ID: D2B44BQ_034% Moisture: 31 decanted: NDate Received: 03/11/97Extraction: (SepF/Cont/Sonc) SONCDate Extracted: 03/14/97Concentrated Extract Volume: 10000 (uL)Date Analyzed: 03/19/97Injection Volume: 5.0 (uL)Dilution Factor: 5.00GPC-Cleanup: (Y/N) N pH: Sulfur Cleanup: Y

CAS NO. COMPOUND

CONCENTRATION UNITS: Q
(ug/L or ug/Kg) UG/KG

12674-11-2	Aroclor-1016	240	U
11104-28-2	Aroclor-1221	240	U
11141-16-5	Aroclor-1232	240	U
53469-21-9	Aroclor-1242	3000	
12672-29-6	Aroclor-1248	240	U
11097-69-1	Aroclor-1254	240	U
11096-82-5	Aroclor-1260	260	

FORM 1
PEST/PCB ORGANICS ANALYSIS DATA SHEET

CLIENT ID

SS04

Lab Name: IEA-NJClient: Allied Signal Inc.Matrix: (soil/water): SOILLab Sample ID: 71102008Sample wt/vol: 30 (g/ml) gLab File ID: D2B44B0_032% Moisture: 31 decanted: NDate Received: 03/11/97Extraction: (SepF/Cont/Sonc) SONCDate Extracted: 03/14/97Concentrated Extract Volume: 10000 (uL)Date Analyzed: 03/19/97Injection Volume: 5.0 (uL)Dilution Factor: 5.00GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: Y

CAS NO. COMPOUND

CONCENTRATION UNITS: Q
(ug/L or ug/Kg) UG/KG

12674-11-2	Aroclor-1016	240	U
11104-28-2	Aroclor-1221	240	U
11141-16-5	Aroclor-1232	240	U
53469-21-9	Aroclor-1242	3200	
12672-29-6	Aroclor-1248	240	U
11097-69-1	Aroclor-1254	240	U
11096-82-5	Aroclor-1260	450	

000080

FORM 1
PEST/PCB ORGANICS ANALYSIS DATA SHEET

CLIENT ID

SS05

Lab Name: IEA-NJClient: Allied Signal Inc.Matrix: (soil/water): SOILLab Sample ID: 71102009Sample wt/vol: 30 (g/ml) gLab File ID: D2B44BQ_033% Moisture: 25 decanted: NDate Received: 03/11/97Extraction: (SepF/Cont/Sonc) SONCDate Extracted: 03/14/97Concentrated Extract Volume: 10000 (uL)Date Analyzed: 03/19/97Injection Volume: 5.0 (uL)Dilution Factor: 5.00GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: Y

CAS NO. COMPOUND

CONCENTRATION UNITS: Q
(ug/L or ug/Kg) UG/KG

12674-11-2	Aroclor-1016	220	U
11104-28-2	Aroclor-1221	220	U
11141-16-5	Aroclor-1232	220	U
53469-21-9	Aroclor-1242	1800	
12672-29-6	Aroclor-1248	220	U
11097-69-1	Aroclor-1254	220	U
11096-82-5	Aroclor-1260	550	

Industrial & Environmental Analysts, Inc (IEA-NJ)
Petroleum Hydrocarbon Analysis
Method 8015M

IEA Project No: 20970-71102 Date Sampled: 03/11/97
IEA Sample No: 71102001 Date Received: 03/11/97
Client Sample No: SS01 Date Extracted: 03/25/97

Extraction (SW846 - 3550) / GC-FID analysis (for #2 fuel oil,
kerosene, varsol).

Date Analyzed: 04/01/97

Results:

The sample contains petroleum hydrocarbons in the
distillation range of #2 fuel oil. The concentration is
160 mg/kg.

Comments: The sample was analyzed with a 10 fold dilution.

=====

Purge and Trap (SW846 - 5030) / GC-FID analysis (for gasoline
only).

Date Analyzed: 03/25/97

Results:

The sample does not contain petroleum hydrocarbons in the
distillation range of Gasoline. The quantitation limit is 2.9
mg/kg.

Comments:

Industrial & Environmental Analysts, Inc (IEA-NJ)
Petroleum Hydrocarbon Analysis

Method 8015M

IEA Project No: 20970-71102

Date Sampled: 03/11/97

IEA Sample No: 71102003

Date Received: 03/11/97

Client Sample No: SS02

Date Extracted: 03/25/97

Extraction (SW846 - 3550) / GC-FID analysis (for #2 fuel oil, kerosene, varsol).

Date Analyzed: 04/01/97

Results:

The sample contains petroleum hydrocarbons in the distillation range of #2 fuel oil. The concentration is 2500 mg/kg.

Comments: The sample was analyzed with a 50 fold dilution.

=====

Purge and Trap (SW846 - 5030) / GC-FID analysis (for gasoline only).

Date Analyzed: 03/25/97

Results:

The sample does not contain petroleum hydrocarbons in the distillation range of Gasoline. The quantitation limit is 2.9 mg/kg.

Comments:

Industrial & Environmental Analysts, Inc (IEA-NJ)
Petroleum Hydrocarbon Analysis
Method 8015M

IEA Project No: 20970-71102 Date Sampled: 03/11/97
IEA Sample No: 71102004 Date Received: 03/11/97
Client Sample No: SS06DUP Date Extracted: 03/25/97

Extraction (SW846 - 3550) / GC-FID analysis (for #2 fuel oil,
kerosene, varsol).

Date Analyzed: 04/01/97

Results:

The sample contains petroleum hydrocarbons in the
distillation range of #2 fuel oil. The concentration is 2800
mg/kg.

Comments: The sample was analyzed with a 50 fold dilution.

=====

Purge and Trap (SW846 - 5030) / GC-FID analysis (for gasoline
only).

Date Analyzed: 03/25/97

Results:

The sample does not contain petroleum hydrocarbons in the
distillation range of Gasoline. The quantitation limit is 3.0
mg/kg.

Comments:

Industrial & Environmental Analysts, Inc (IEA-NJ)
Petroleum Hydrocarbon Analysis
Method 8015M

IEA Project No: 20970-71102 Date Sampled: 03/11/97
IEA Sample No: 71102005 Date Received: 03/11/97
Client Sample No: SS03 Date Extracted: 03/25/97

Extraction (SW846 - 3550) / GC-FID analysis (for #2 fuel oil,
kerosene, varsol).

Date Analyzed: 04/01/97

Results:

The sample contains petroleum hydrocarbons in the
distillation range of #2 fuel oil. The concentration is
3900 mg/kg.

Comments: The sample was analyzed with a 50 fold dilution.

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Purge and Trap (SW846 - 5030) / GC-FID analysis (for gasoline
only).

Date Analyzed: 03/25/97

Results:

The sample does not contain petroleum hydrocarbons in the
distillation range of Gasoline. The quantitation limit is 3.6
mg/kg.

Comments:

Industrial & Environmental Analysts, Inc (IEA-NJ)
Petroleum Hydrocarbon Analysis
Method 8015M

IEA Project No: 20970-71102 Date Sampled: 03/11/97
IEA Sample No: 71102008 Date Received: 03/11/97
Client Sample No: SS04 Date Extracted: 03/25/97

Extraction (SW846 - 3550) / GC-FID analysis (for #2 fuel oil,
kerosene, varsol).

Date Analyzed: 04/01/97

Results:

The sample contains petroleum hydrocarbons in the
distillation range of #2 fuel oil. The concentration is 5800
mg/kg.

Comments: The sample was analyzed with a 100 fold dilution.

=====

Purge and Trap (SW846 - 5030) / GC-FID analysis (for gasoline
only).

Date Analyzed: 03/25/97

Results:

The sample does not contain petroleum hydrocarbons in the
distillation range of Gasoline. The quantitation limit is 3.6
mg/kg.

Comments:

Industrial & Environmental Analysts, Inc (IEA-NJ)
Petroleum Hydrocarbon Analysis
Method 8015M

IEA Project No: 20970-71102 Date Sampled: 03/11/97
IEA Sample No: 71102009 Date Received: 03/11/97
Client Sample No: SS05 Date Extracted: 03/25/97

Extraction (SW846 - 3550) / GC-FID analysis (for #2 fuel oil, kerosene, varsol).

Date Analyzed: 04/01/97

Results:

The sample contains petroleum hydrocarbons in the distillation range of #2 fuel oil. The concentration is 8600 mg/kg.

Comments: The sample was analyzed with a 100 fold dilution.

=====

Purge and Trap (SW846 - 5030) / GC-FID analysis (for gasoline only).

Date Analyzed: 03/25/97

Results:

The sample contains petroleum hydrocarbons in the distillation range of Gasoline. The concentration is 4.4 mg/kg.

Comments:

000435

CLIENT : Allied Signal Inc.MATRIX: LEACHATEJOB No.: 71102

TOXICITY CHARACTERISTIC LEACHING PROCEDURE
(TCLP) PART 261

Units: MG/L

Lab I.D.	LB-395	LB-688	71102001	71102003	71102005	Regulatory Limits
Client I.D.	LEACH BLANK	LEACH BLANK	SS01	SS02	SS03	
*** VOLATILES ***						
Benzene	<0.05		<0.05	<0.05	<0.05	0.5
*** METALS ***						
Arsenic		<0.200	<0.200	<0.200	<0.200	5.0
Chromium		<0.100	<0.100	<0.100	<0.100	5.0
Lead		<0.100	0.207	0.103	0.107	5.0

CLIENT : Allied Signal Inc.MATRIX: LEACHATEJOB No.: 71102

TOXICITY CHARACTERISTIC LEACHING PROCEDURE
(TCLP) PART 261

Units: MG/L

Lab I.D.	71102006MS	71102007MSD	71102008	71102009		Regulatory Limits
Client I.D.	SS03 MSMS	SS03 MSDMSD	SS04	SS05		
*** VOLATILES ***						
Benzene	80%	82%	<0.05	<0.05		0.5
*** METALS ***						
Arsenic	103%	<0.200	<0.200	<0.200		5.
Chromium	95.7%	<0.100	<0.100	<0.100		5.0
Lead	93.7%	<0.112	0.193	0.594		5.0

Bulk Asbestos Analysis- IEA, Inc.
149 Rangeway Road, N. Billerica, MA 01862

(EPA Method EPA-600/M4-82-20)*

Client: IEA-NJ
Project: 71103

Date: 03/27/97
IEA ID: 0071-122.01
Analyst: M BUSHEY

Sample Number: 1
Client Location:
Gross Appearance: Mixed Fibrous and Non-Fibrous
Color, Texture, etc.:

Non-Asbestos Fibers: 65 Percent Total Non-Asbestos Fiber

Fiber Type	Diagnostic Optical Property
Mineral Wool	Isotropic

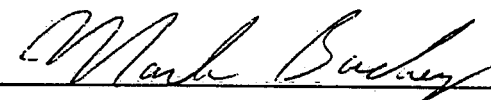
Non-Fiber Matter: 20 Percent Non-Fiber Matter

Mineral Grains
Opaques/Paint Chips

Asbestos Fibers:	15 Percent Total Asbestos Fiber
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Asbestos Lab Data	Chrysotile	Amosite
Percent: 10		5
Morphology: Wavy		Straight
Color: None		None
Pleochroism: Non-pleochroic		Non-pleochroic
Extinction Angle: P		P
Birefringence: 0.009		0.033
Sign of Elongation: Positive		Positive
Index (Parallel): 1.553		1.703
Index (Perpendicular): 1.544		1.67
Immersion Media: 1.550HD 1.680		1.550HD 1.680
Other Features:		

Date: 03/27/97

Signed: 

IEA, Inc. is accredited by the National Institute for Standards and Technology (formerly NBS), NVLAP (Lab 101005-0) for asbestos analysis of bulk samples by Polarized Light Microscopy with Optical Dispersion Staining (PLM/DS).

* IEA also follows the EPA recommendation and uses Method EPA/600/R-93/116.

Accreditation in no way constitutes or implies product certification, approval, or endorsement by NIST. This report relates only to the specific sample tested herein.

000008

Bulk Asbestos Analysis- IEA, Inc.
149 Rangeway Road, N. Billerica, MA 01862

(EPA Method EPA-600/M4-82-20)*

Client: IEA-NJ
Project: 71103

Date: 03/27/97
IEA ID: 0071-122.02
Analyst: M BUSHEY

Sample Number: 2
Client Location:
Gross Appearance: Mixed Fibrous and Non-Fibrous
Color, Texture, etc.:

Non-Asbestos Fibers: 2 Percent Total Non-Asbestos Fiber

Fiber Type	Diagnostic Optical Property
Mineral Wool	Isotropic

Non-Fiber Matter: 73 Percent Non-Fiber Matter

Mineral Grains

Asbestos Fibers:	25 Percent Total Asbestos Fiber
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Asbestos Lab Data	Amosite	Chrysotile
Percent: 15	10	
Morphology: Straight	Wavy	
Color: None	None	
Pleochroism: Non-pleochroic	Non-pleochroic	
Extinction Angle: P	P	
Birefringence: 0.033	0.009	
Sign of Elongation: Positive	Positive	
Index (Parallel): 1.703	1.553	
Index (Perpendicular): 1.67	1.544	
Immersion Media: 1.550HD 1.680	1.550HD 1.680	
Other Features:		

Date: 03/27/97

Signed: 

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Bulk Asbestos Analysis- IEA, Inc.
149 Rangeway Road, N. Billerica, MA 01862

(EPA Method EPA-600/M4-82-20)*

Client: IEA-NJ
Project: 71103

Date: 03/27/97
IEA ID: 0071-122.03
Analyst: M BUSHEY

Sample Number: 3
Client Location:
Gross Appearance: Mixed Fibrous and Non-Fibrous
Color, Texture, etc.:

Non-Asbestos Fibers: None Detected

Non-Fiber Matter: 40 Percent Non-Fiber Matter

Mineral Grains
Opagues/Paint Chips

Asbestos Fibers:	60 Percent Total Asbestos Fiber
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Asbestos Lab Data	Chrysotile
Percent:	60
Morphology:	Wavy
Color:	None
Pleochroism:	Non-pleochroic
Extinction Angle:	P
Birefringence:	0.009
Sign of Elongation:	Positive
Index (Parallel):	1.553
Index (Perpendicular):	1.544
Immersion Media:	1.550HD 1.680
Other Features:	

Date: 03/27/97

Signed: 

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Bulk Asbestos Analysis- IEA, Inc.
149 Rangeway Road, N. Billerica, MA 01862

(EPA Method EPA-600/M4-82-20)*

Client: IEA-NJ
Project: 71103

Date: 03/27/97
IEA ID: 0071-122.04
Analyst: M BUSHEY

Sample Number: 4
Client Location:
Gross Appearance: Fibrous
Color, Texture, etc.:

Non-Asbestos Fibers: 95 Percent Total Non-Asbestos Fiber

Fiber Type	Diagnostic Optical Property
Mineral Wool	Isotropic

Non-Fiber Matter: 5 Percent Non-Fiber Matter

Mineral Grains

Asbestos Fibers:	None Detected
------------------	---------------

Date: 03/27/97

Signed: 

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